

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

American Family Mutual Insurance  
Company,

Plaintiff,

v.

Hewlett-Packard Company,

Defendant.

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**MEMORANDUM OPINION**

**AND ORDER**

Civil No. 07-792 ADM/AJB

Steven L. Theesfeld, Esq., and David J. Taylor, Esq., Yost & Baill, L.L.P., Minneapolis, MN, on behalf of Plaintiff.

Rachel B. Peterson, Esq., and Andrew L. Marshall, Esq., Bassford Remele, PA, Minneapolis, MN, on behalf of Defendant.

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**I. INTRODUCTION**

The undersigned United States District Judge heard oral argument on Defendant Hewlett-Packard Company's ("Hewlett-Packard") Motion for Summary Judgment [Docket No. 12] on February 14, 2008. Plaintiff American Family Mutual Insurance Company ("American Family") sued Hewlett-Packard to recover the \$170,091.35 American Family paid to its insured in satisfaction of claims arising under the policy. American Family asserts that Hewlett-Packard is liable under the following theories: (1) negligent manufacture or design; (2) failure to warn; (3) strict liability; and (4) breach of warranty. For the reasons stated herein, Hewlett-Packard's Motion is denied.

## II. BACKGROUND<sup>1</sup>

This case involves a dispute over who should bear the costs arising out of a fire at the home of American Family's insureds, Henry and Diana Harris (the "Harrises"). On September 6, 2005, a fire occurred at the Harris home in Minneapolis, Minnesota. Marshall Aff. [Docket No. 15] Exs. C, D. The Harrises had returned home that night after being on vacation for several days. Id. At approximately 2:54 a.m. on September 6, 2005, Mr. Harris awoke to the sound of the smoke detector and the smell of smoke. Marshall Aff. Ex. C at 2. Mr. Harris alerted his wife, who was sleeping in a first-floor bedroom, and determined that the fire was in the second-floor attic of the home. Id. Before the fire, Mr. Harris' son had been occasionally staying at the home, using the attic area for a bedroom. Marshall Aff. Ex. D at 3. Mr. Harris' son had been staying at the home with his two cousins while the Harrises were away on vacation. Marshall Aff. Ex. B. When the fire department arrived, Mr. Harris asked the firefighters to check for his son because he was unsure whether his son might be in the house. Id. The fire department determined that Mr. Harris' son was not in the home. Id.

The second floor of the Harris home is a finished attic. Marshall Aff. Ex. D at 2. The attic is a large space used as a bedroom and office. Id. The attic is approximately twelve feet wide and twenty-nine feet long and runs east to west lengthwise. The attic area is in the shape of an isosceles trapezoid.<sup>2</sup> The flat portion of the ceiling, which runs north to south, is approximately four feet wide and then slopes downward following the roof line. Marshall Aff.

<sup>1</sup> On a motion for summary judgment, the Court views the evidence in the light most favorable to the nonmoving party. Ludwig v. Anderson, 54 F.3d 465, 470 (8th Cir. 1995).

<sup>2</sup>



Ex. C. As the ceiling slants down towards the edge of the roofline, it is bisected by a short wall, referred to as a knee wall. Marshall Af f. Ex. D at 2. The area between the knee wall and the roofline is used as storage. Id. There was a bed located along the west wall, a TV stand east of the bed along the south knee wall, and a desk and shelf east of the bed along the north knee wall. Id. at 3. On the desk and shelf was a Gateway computer and a Hewlett-Packard Apollo printer (the “HP Apollo printer”). Id.

Minneapolis Fire Department Investigator Vicki Hoff (“Hoff”) conducted an investigation of the fire scene on September 8, 2005. Marshall Aff. Ex. C. On September 9, 2005, Thomas Haney (“Haney”), an American Family Special Investigations Unit senior field investigator who had been assigned to the Harris fire, went to the Harris home to investigate the fire scene. Marshall Aff. Ex. E at 39. Haney’s investigation focused on determining the origin of the fire, while determination of the cause of the fire was the responsibility of Anderson Engineering. Marshall Aff. Ex. G, at 7-8. On September 15, 2005, Andrew Paris (“Paris”), with Anderson Engineering, investigated the fire scene for American Family. Marshall Aff. Ex. D. On October 6, 2005, Anderson Engineering conducted a second scene inspection, this time with representatives of eMachines/Gateway, the manufacturer of the computer and monitor, and Hewlett-Packard, the manufacturer of the HP Apollo printer. Id.

Hoff concluded that the fire started in the cockloft area but was unable to determine the cause; Hoff theorized that the fire was most likely caused by the thunder and lightning storm in the area the night of the fire:

In conclusion, the fire started in the second story cockloft area. . . . This is where all the electrical wiring was located as well as junction boxes for several lights and a ceiling fan. The electrical wiring in this cockloft area was heavily damaged by the fire. The charring was greatest in the cockloft area. Firefighters

reported that when they knocked the fire down, the entire covering of the ceiling was already consumed by the fire. I did not find any evidence of low level burning or any burning at the floor level. Smoke demarcation was visible to approximately 1 ft. from the floor in the area where the heaviest fire damage was to approximately 4-5 ft. in the east section of the attic area/room of origin. There was no fire extension into the walls or burning through the roof. . . .

However, I cannot pinpoint an exact cause of the fire. It is most likely this is an electrical fire and could be related to the thunder and lightning storm that was occurring just prior to the discovery of the fire.

Marshall Aff. Ex. C. Hoff noted that the damage was worse on the west end of the attic. Id.

The Anderson Engineering report provides a discussion of the home layout and construction; the fire sequence of events; the burn patterns and area of fire origin (including a detailed discussion of the fire damage to the furniture and electronic equipment); the home's electrical system, the artifacts recovered from the scene and the facts derived from examining those artifacts; the testing Anderson Engineering performed as part of its investigation; analysis of the data gathered during its testing; the probable hypotheses of ignition; and Anderson Engineering's ultimate conclusions. Marshall Aff. Ex. D. Based on Paris' initial investigation of the fire scene, Anderson Engineering concluded that "the fire originated along the north wall of the second floor bedroom, near a desktop computer and associated equipment." Id. at 1. Accordingly, Anderson Engineering focused its second investigation on its determined area of origin and recovered the following artifacts from the scene: (1) the computer desk, the stand, the computer, and the associated equipment (including the HP Apollo printer); (2) three receptacles that powered the electronic equipment; (3) carpet and debris samples from the area near the desk and the area of lowest burning; (4) two light fixtures on the west end of the attic bedroom and their associated wiring; and (5) the circuit breaker protecting the circuit that traveled up from the

basement to the attic bedroom circuit. Id. at 4-5. Anderson Engineering performed tests on an exemplar HP Apollo printer and on other fire scene artifacts. Id. at 2.

Anderson Engineering identified five probable hypotheses of ignition: (1) “A failure o[f] the desktop computer ignited the fire”; (2) “The fire occurred due to a failure of the computer monitor”; (3) “Failure of one of the other electrical devices resulted in the fire”; (4) “The fire occurred due to an arcing event or other failure of the printer line cord”; and (5) “The fire was caused by an internal failure within the printer.” Id. at 12. Based on its investigation, Anderson Engineering concluded that hypotheses one through three did not fit the evidence of the case, that hypothesis four was unlikely, and that hypothesis five best fit the evidence. Id. at 13. Accordingly, Anderson Engineering concluded that the “HP Apollo printer was the most probable source of ignition located in the area of fire origin.” Id.

In support of its conclusion, Anderson Engineering explained that the printer “sustained damage indicative of a long-term, developing component failure leading to localized heating, thermal runaway, or catastrophic failure.” Id. Further, Anderson Engineering explained that the burn patterns in the attic “reflect the damage sustained by the printer and support a fire origination at the printer.” Id. Finally, Anderson Engineering stated that based on the type of equipment involved in the fire; the condition of the artifacts recovered from the scene; the circumstances of the fire; the testing performed on the exemplar printer; and the experience, education, and training of its engineers; it concluded that “the fire in the Harris residence was caused by a component failure or manufacturing defect of the HP Apollo printer.” Id. Despite concluding that the printer had an internal or manufacturing defect, Paris stated that he was unable to determine a specific component failure within the printer. Paris Dep. (Theesfeld Aff.

[Docket No. 20] Ex. B) at 12. Instead, Paris stated that based on the “totality of the evidence” it was his belief that there was a general component failure in the printer. Id. at 14. Paris explained that while it was his opinion that the fire originated within the printer, “most likely on the circuit board,” he was unable to determine what component specifically failed because of the significant fire damage. Id. at 15. Despite his inability to determine the specific component failure, Paris explained that the burn pattern, the electrical evidence in the attic, the sequence of the events, and the testing he performed, supported his conclusion that the printer experienced a general defect failure and that the fire started from within the printer. Id. at 14-15.

### **III. DISCUSSION**

#### **A. Standard of Review**

Federal Rule of Civil Procedure 56(c) provides that summary judgment shall issue “if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c); see Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986); Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). On a motion for summary judgment, the Court views the evidence in the light most favorable to the nonmoving party. Ludwig, 54 F.3d at 470. The nonmoving party may not “rest on mere allegations or denials, but must demonstrate on the record the existence of specific facts which create a genuine issue for trial.” Krenik v. County of Le Sueur, 47 F.3d 953, 957 (8th Cir. 1995).

## B. Admissibility of Expert Testimony

The standards regarding the admissibility of expert testimony are set forth in Federal Rule of Evidence 702 and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993). Rule 702, which was amended in 2000 to reflect the analysis in Daubert, requires district courts to act as gate-keepers and ensure the reliability and relevancy of expert testimony. Fed. R. Evid. 702, cmts. to 2000 Amendments; see Kumho Tire Co. v. Carmichael, 526 U.S. 137, 149 (1999); see also Fed. R. Evid. 104(a). District courts may admit expert testimony to help the jury understand the evidence or determine a disputed fact if: (1) the witness qualifies as an expert by his or her knowledge, skill, experience, training, or education; (2) the witness bases his or her testimony on sufficient facts or data; (3) the testimony is the product of reliable principles and methods; and (4) the witness has applied the principles and methods reliably to the facts of the case. Fed. R. Evid. 702. “The proponent of the expert testimony must prove its admissibility by a preponderance of the evidence.” Lauzon v. Senco Prods., Inc., 270 F.3d 681, 686 (8th Cir. 2001) (citing Daubert, 509 U.S. at 592 n.10).

In Daubert, the U.S. Supreme Court outlined four nonexclusive factors courts may weigh in determining admissibility. 509 U.S. at 593-94. These include: (1) whether the theory or technique has been tested; (2) whether it has been subjected to peer review and publication; (3) the theory or technique’s known error rate; and (4) whether the theory or technique is widely accepted. Id. Courts may consider other factors as well, including “whether the proposed expert ruled out other alternative explanations, and whether the proposed expert sufficiently connected the proposed testimony with the facts of the case.” Lauzon, 270 F.3d at 687.

Hewlett-Packard argues that the expert witness reports produced on behalf of American Family by Anderson Engineering are unreliable and do not present evidence that will be admissible at trial. Hewlett-Packard contends that Anderson Engineering failed to use reliable principles and methods in developing its report, specifically, Hewlett-Packard faults Anderson Engineering for failing to exclusively follow the methodology set forth in the National Fire Protection Association's Guide for Fire and Explosion Investigations ("NFPA 921"), which it contends is the industry standard. American Family contends that Anderson Engineering offered a sophisticated methodology supporting its theory of the cause of the fire and that a failure to follow NFPA 921 should not disqualify Anderson Engineering's report. American Family asserts that while NFPA 921 is recognized as a reliable method, it is not the only reliable method of fire investigation. Accordingly, it asserts that Anderson Engineering's decision to use a methodology that borrows from NFPA 921 as well as other guides, such as Kirk's Fire Investigation and The Ignition Handbook, does not establish that Anderson Engineering's report is per se unreliable.

Hewlett-Packard has cited no case law to support the proposition that a failure to strictly adhere to NFPA 921 renders an investigation per se unreliable. NFPA 921 is not the exclusive standard for investigating fire and explosion. Accordingly, the Court will not exclude Anderson Engineering's report simply because Anderson Engineering did not use NFPA 921 as its sole standard methodology.

Hewlett-Packard also asserts that the Court should exclude Anderson Engineering's report because Anderson Engineering failed to compare its hypotheses to all the known facts of the case:

[Anderson Engineering's] report does not discuss, or even mention: the potential role that the Harris' son or his cousins may have had; the thunderstorm in the area on the night of the fire; the previous leaking through light fixtures that existed in the Harris home; the extensive damage to the cockloft area; or the reasons for reaching a different conclusion from that of Vicki Hoff . . . .

Def.'s Mem. in Supp. of Mot. for Summ. J. [Docket No. 14] at 18. American Family asserts that "Anderson Engineering accumulated and reviewed all available evidence and used this to pinpoint the fire's cause to an 'area of origin.'" Pl.'s Mem. in Opp'n to Def.'s Mot. for Summ. J. [Docket No. 19] at 4. American Family also contends that an argument that Anderson Engineering's methodology is lacking for failing to consider other causes improperly calls on the Court to weigh the evidence—a task that they contend is not proper on summary judgment.

Anderson Engineering did fail to discuss in its report the factors listed by Hewlett-Packard; however, Anderson Engineering explained that this was so because of its determination regarding the origin of the fire. In her deposition, Beth Anderson, of Anderson Engineering, explained why Anderson Engineering ruled out the factors listed by Hewlett-Packard:

They talk about smoking and candles, for instance. We don't have any people up there during that two hours and we don't find any physical evidence of smoking materials or candles in that area.

Also they were critical of the lightning issue because of the thunder storm and the previous history and so on, and I think a couple of facts help us eliminate that. One is that the lightning reports that were done indicate that lightning did not strike the house that night. There is no other physical evidence to suggest that lightning did strike the house in the electrical system.

Anderson Dep. (Theefeld Aff. Ex. C) at 48-49. Anderson was also able to explain the reasons why they disagreed with Hoff's opinion that the fire originated in the cockloft area. Id. at 42-43. Accordingly, it appears that Anderson Engineering did consider other possible points of origin of

the fire. Whether they correctly determined the area of origin and whether their decision to disregard the factors listed by Hewlett-Packard was mistaken presents a fact issue.

Next, Hewlett-Packard argues that because Anderson Engineering determined there were five “probable” hypotheses of ignition, Anderson Engineering was required, according to NFPA 921, section 18.6, to classify the cause of the fire as undetermined. In questioning Paris and Beth Anderson, Hewlett-Packard focused on Anderson Engineering’s use of the word probable. Paris Dep. at 76; Anderson Dep. at 58-60. NFPA 921 defines “probable” as “more likely true than not . . . the likelihood of the hypothesis being true is greater than 50%.” Def.’s Mem. in Supp. of Mot. for Summ. J. at 14 (quoting NFPA § 18.6). “Possible” is defined as feasible but not probable: “If two or more hypotheses are equally likely, then the level of certainty must be ‘possible.’” Id. In their deposition testimony, Paris and Beth Anderson made clear that they did not rely exclusively on NFPA 921 in drafting the Anderson Engineering report and did not utilize the term “probable” as defined by NFPA 921. Paris explained:

Q: So you’ve identified five different hypotheses. Each one has a greater than 50 percent chance of being correct?

A: No.

Q: So then they aren’t probable?

A: I guess it would be possible by your definition.

Paris Dep. at 76. Beth Anderson admitted during her deposition that the use of the term probable in the Anderson Engineering report was not in compliance with NFPA 921, but she also made clear that Anderson Engineering did not rely exclusively on the methodology and standards set forth in NFPA 921. Anderson Dep. at 59.

Again, although compliance with NFPA 921 may be an important credential for expert testimony, it does not have talismanic significance. Here, American Family's experts have made clear that they identified five possible hypotheses of ignition and then used the scientific method to determine which of the five hypotheses is most probable. Although Anderson Engineering used the term "probable" in its report, the deposition testimony of Paris and Beth Anderson make clear that by "probable," Anderson Engineering meant "possible." Further, as the Court has already found, even if Anderson Engineering had failed to comply with NFPA 921, there may still be an evidentiary basis for admissibility of the report.

Finally, in its reply brief Hewlett-Packard argues that the Court should exclude American Family's expert testimony because Anderson Engineering's testing did not replicate the scenario that occurred the night of the fire and because the conditions of the exemplar printer were not identical to the HP Apollo printer. "Absent some reason for failing to raise an argument in an opening brief, this court will not consider an argument first raised in a reply brief." United States v. Brown, 108 F.3d 863, 867 (8th Cir. 1997). In its opening brief, Hewlett-Packard raised the issue of Anderson Engineering's testing in support of its argument that American Family has no facts demonstrating causation, but there is no mention of Anderson Engineering's testing in the argument section advocating for the exclusion of expert testimony. However, in support of its arguments that the testing did not support causation, Hewlett-Packard did cite cases where expert testimony was excluded because the expert's testing was not reflective of the fire scene and the artifacts and did not support the expert's hypothesis. Def.'s Mem. in Supp. of Mot. for Summ. J. at 20 (citing Hughes v. Black & Decker (US), Inc., No. 05-1536, 2007 WL 624333 (D. Minn. Jan. 24, 2007)). Because this is arguably sufficient to notify American Family that

Hewlett-Packard was challenging the expert testimony based on Anderson Engineering's testing, the Court will address this argument.

Hewlett-Packard faults Anderson Engineering for failing to replicate the scenario that occurred at the fire and the exact conditions of the HP Apollo printer; however, Hewlett-Packard has not asserted that the testing Anderson Engineering performed is not informative, fails to support Anderson Engineering's conclusions, or is contradictory. This is very different than Fireman's Fund Insurance Co. v. Canon U.S.A., Inc., where the defendant's expert filed a report challenging the plaintiffs' theory, the defendant demonstrated that the testing plaintiffs' experts performed did not support their opinions, and where the defendant pointed out that plaintiffs' experts failed to reconcile empirical evidence with their theory of causation. 394 F.3d 1054, 1057 (8th Cir. 2005).

Section 20.5.3 of NFPA 921, the methodology endorsed by Hewlett-Packard, explains that it may be impossible for fire testing to recreate the conditions of the fire and that the conditions that the testing cannot replicate should be considered in reaching conclusions based on the test results. Hewlett-Packard does not contend that in reaching its ultimate conclusion, Anderson Engineering failed to consider the differences between the testing it conducted and the actual scenario that occurred or that Anderson Engineering failed to consider the differences between the exemplar printer and the HP Apollo printer. The fact that there are conditions Anderson Engineering could not replicate does not, by itself, require that the Court exclude the testimony of Anderson Engineering as unreliable.

### C. Causation

To recover on claims of negligence, failure to warn, strict liability, and breach of warranty, the plaintiff must demonstrate causation. Fireman's Fund, 394 F.3d at 1060; Germann v. F.L. Smithe Mach. Co., 395 N.W.2d 922, 924 (Minn. 1986). Hewlett-Packard asserts that it is entitled to summary judgment on American Family's claims for negligence, failure to warn, strict liability, and breach of warranty because American Family cannot prove that the HP Apollo printer was defective or that the defect caused the fire. Hewlett-Packard asserts that the only evidence American Family has that the HP Apollo printer was defective is its proposed expert testimony. Hewlett-Packard contends that this is insufficient to support causation because the expert testimony is based on testing that failed to replicate the scenario at the fire and because Anderson Engineering did not disprove the theory that the fire originated in the cockloft and burned top down. Hewlett-Packard's argument is essentially that for the same reasons that it believes the Court should exclude American Family's experts, American Family has failed to establish a genuine issue regarding causation.

Having decided not to exclude American Family's expert testimony, there is a genuine issue on the record regarding causation. Although Anderson Engineering was unable to determine which specific component within the HP Apollo printer failed, it stated its belief that there was a general component failure, the reasons why it came to that conclusion, and the reasons why it ruled out other hypotheses. When asked what evidence indicated that there was a general component failure in the printer, Paris explained: "The burn patterns on the scene, the electrical evidence in the room, the sequence of events, [and] testing." Paris Dep. at 14-15. Paris further explained what facts supported his conclusion: "I believe an internal source would

have caused more damage to the printer than an external fire. There was a monitor right next to the printer that was hit by fire and its interior components were not as damaged as the printer.”

Id. at 19. This testimony creates a genuine issue of fact and it is for the jury to assess the credibility of experts allowed to testify at trial. Once again, this case is distinguishable from Fireman's Fund where the experts' testimony demonstrated that the tests performed did not support the experts' conclusion and the experts failed to reconcile empirical evidence with their theory of causation. 394 F.3d at 1058-61.

#### IV. CONCLUSION

Based upon the foregoing, and all the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that Defendant's Motion for Summary Judgment [Docket No. 12] is **DENIED**.

BY THE COURT:

s/Ann D. Montgomery  
ANN D. MONTGOMERY  
U.S. DISTRICT JUDGE

Dated: May 19, 2008.